Screening for High Blood Pressure in Children and Adolescents

The US Preventive Services Task Force (USPSTF) recently published recommendations on screening for high blood pressure in children and adolescents.

**What Is High Blood Pressure?**
High blood pressure is a common problem in both adults and children. In recent years, the rate of high blood pressure in children and adolescents has been increasing, possibly driven by an increase in childhood obesity. In adults, high blood pressure is commonly defined as blood pressure greater than 130/90 mm Hg. In children, the definition varies based on age, height, and sex.

High blood pressure in childhood is often linked to high blood pressure in adulthood, which is a major risk factor for cardiovascular disease. In children and adolescents, high blood pressure can often be treated by changes in lifestyle: a low-salt diet, regular exercise, and weight loss for children who are overweight or obese. If lifestyle changes are not enough, medications can also be used to lower blood pressure.

**What Test Is Used to Screen for High Blood Pressure?**
Screening for high blood pressure is done by taking a blood pressure reading using a monitor with an inflatable cuff that goes over the upper arm. It is suggested that 3 readings be taken at 3 separate visits. Sometimes, additional monitoring of blood pressure at home over a period of 12 to 24 hours (ambulatory blood pressure monitoring) is done to confirm the diagnosis.

**What Is the Population Under Consideration for Screening for High Blood Pressure?**
This recommendation applies to children and adolescents who do not already have a diagnosis of high blood pressure.

**What Are the Potential Benefits and Harms of Screening for High Blood Pressure in Children and Adolescents?**
It is known that high blood pressure in adults is a major risk factor for cardiovascular disease, including heart attack and stroke. Studies have shown that high blood pressure in childhood is linked to high blood pressure in adulthood. Therefore, the potential benefit of early diagnosis (and treatment) of high blood pressure in childhood is a decrease in cardiovascular disease (including heart attack and stroke) in either childhood or adulthood. However, no studies have directly looked at this potential link.

Potential harms of screening include false-positive results (falsely elevated blood pressure readings) that may lead to extensive further testing and possible unnecessary treatment with medications, which can have side effects.

**How Strong Is the Recommendation to Screen for High Blood Pressure in Children and Adolescents?**
Based on current evidence, the USPSTF concludes that the balance of benefits and harms for screening for high blood pressure in children and adolescents cannot be determined.

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US Preventive Services Task Force
www.uspreventiveservicestaskforce.org/uspstf/topic_search_results?topic_status=P

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